SECTION 108 - PLANT MATERIALS

1. GENERAL

The work covered in this section consists of furnishing all equipment, materials and labor required for the installation of the plant materials in the locations shown on the detailed drawings.

2. PLANT MATERIALS

- A. <u>Measurement.</u> All trees and shrubs shall be measured when their branches are in their normal position. Height and spread dimensions specified refer to the main body of the plant and not from branch or root tip to tip. Trees which have had their leaders out, or so damaged that cutting is necessary, will not be accepted.
- B. <u>Size.</u> All plants shall conform to the size, form and condition as specified in the plant list or shown on the drawings. Plants larger than specified in the plant list may be used if approved, but use of such plants shall not increase the contract price.
- C. <u>Inspections.</u> Plants shall be subject to inspection and approval at place of growth, or upon delivery for conformity to specifications requirements as to quality, size and variety. Such approval shall not preclude the right of inspection and rejection upon delivery at the site or during the progress of the work, for size and condition of balls or roots, disease, insects and latent defects or injuries. Rejected plants will be marked and shall be removed immediately from the site and replaced with suitable plants. Specimen plant material may be inspected at place of growth, if requested by Owner.

Typical samples of all varieties and sizes of plants shall be submitted for approval at the site, if required. These samples, if approved, shall be planted and maintained as standards for comparison with plants furnished.

- D. <u>Digging and Handling.</u> Container grown plants may be used where designated in lieu of B & B plants provided size and quality of plant is equal to that set out in specifications. All balls will be intact and in good condition. All containers will be removed from plants prior to planting.
- E. <u>Substitutions</u>. Substitutions will not be permitted except by full justification to and permission of the Owner. Sizes and varieties of plant materials are designated with the intention of achieving a given design composition.
- F. <u>Plant List.</u> The Contractor shall furnish and plant all plants shown on the drawings, as specified and in quantities as shown below:

<u>KEY</u>	QUANTIT	TY COMMON NAME	BOTANICAL NAME	SIZE	SPEC.
Shade & Ornamental Trees					
D1	4	Red Bud	Cercis Canadensis	6-7'	Bareroot
D2	1	Sugar Maple	Acer Saccharum	6-8'	Bareroot
D3	1	Sunburst Locust	Gleditsiatria, inermis aureus	6-8'	Bareroot
D4	3	Golden Raintree	Koelreyteria paniculata	6-8'	Bareroot
D5	3	Flowering Crab	Malus radiant	6-8'	Bareroot
D6	1	<u> </u>	nelliaflora 5-6'	Bareroot	
D7	1	Hawthorne,Washington	Crataegus phaenopyrum	5-6'	Bareroot
D8	2	Lombardy Poplar	Populus nigra	8-10'	B & B
Coniferous Evergreen					
E1	4	Armstrong Juniper	C. V. armstrong	24-30'	B&B
E2	3	Cannarti Juniper	C. V. cannarti	6-7'	B & B
E3	2	Blue Juniper, Chandler	Juniperus scopulorum	6-7'	B & B
E4	3	Savin Juniper, Tamarix	Juniperus sobina	3-4'	B&B
Deciduous Shrubs					
S1	12	Rugosa Rose	Rosa rugosa	18-24"	Bareroot
S2	2	Smoke Tree	Continus coggygria	2-3'	Bareroot
S3	8	Oregon Grape	Agua folium	24-30"	B & B
S4	12	Dwarf Burningbush	Eyonymus alatus compactus	18-24"	Bareroot
S5	2	Flowering Almond Pink	Prunus gladulosa rosea	2-3'	Bareroot
S6	9	Sprea Anthong Waterer	Bumalda spirea	18-24"	Bareroot
S7	15	Vanicek Red Weigela	Weigela	18-24"	Bareroot
S8	2	Althea Red	Hibiscus Syrigcus	2-3'	Bareroot

3.

INSTALLATION OF PLANT MATERIALS

A. <u>Time.</u> The planting season shall be from September 10th to December 15th, for fall planting. Deviation from this will be permitted only when approved in writing by the Owner.

- B. Plant Pits. Plant pits shall be excavated with vertical sides in accordance with the following outline for sizes:
 - 1. Tree pits shall be excavated at least one foot greater in diameter than the diameter of the ball and at least 6 inches deeper than the depth of the ball.
 - 2. Shrubs shall be planted in pits which are at least 8 inches greater than the diameter of the ball and at least 6 inches deeper than the bottom of the ball.
- C. Obstructions Below Ground. In the event that underground construction work or obstructions are encountered in the excavation of plant pits, alternate locations shall be selected by the Owner. The moving of trees to alternate locations shall not entail additional cost to the Owner.

D. Planting Operations for Shrubs and Trees.

- 1. Set plants in pits, plumb and straight, and at such a level that after settlement, the crown of the plant will be at a similar grade as previously grown in the nursery. When balled and burlapped trees are set, compact prepared soil around base of ball to fill all voids. All burlap, ropes, or wires shall be removed from the tops of balls.
- 2. As plant pits are backfilled, the soil shall be thoroughly compacted and watered. After backfill has been completed, a shallow basin slightly larger than the pit shall be formed with a ridge of soil to facilitate watering.

E. Staking Materials.

- 1. All shad trees shall be staked and stakes for supporting trees shall be of sound wood of uniform size and free of knots and holes. They shall be not less than nominal 2" x 2" square and shall be not less than two (2) feet in length.
- 2. Wire for tree bracing and guying shall be pliable No. 12 gage annealed galvanized steel wire.
- 3. Hose for covering wire shall be black or red two-ply fibre-bearing garden hose, not less than 1/2" inside diameter. Seconds rejected by factory may be acceptable.
- F. <u>Wrapping.</u> Newly planted trees, of 2 inches caliper and over, shall have the trunk and lower parts of the first limbs wrapped with burlap or Kraft Crepe Paper 6 inches wide. Trees normally subject to borers shall not be wrapped.
- G. <u>Pruning.</u> Each tree and shrub shall be pruned in accordance with standard horticulture practice to preserve the natural character of the plant, or in the case of specimen plant material, in the manner fitting its use in the landscape scheme.
 - 1. All dead wood or suckers and all broken or badly bruised branches shall be removed by thinning out and shortening branches. All cuts shall be made just above a healthy bud.
 - 2. Pruning shall be done with clean, sharp tools.

4. PLANT GUARANTEE

A. <u>Guarantee.</u> Plants shall be guaranteed by the Contractor for six months and shall be alive and in satisfactory growth at the end of said guarantee period. The contractor will not be liable for plants damaged due to unforeseeable causes beyond his control and without the fault or negligence of Contractor, including, but not restricted to, Acts of God, Acts of another Contractor in the performance of a contract with the Owner, fires, floods, unusually severe weather, vandalism or gross negligence toward the watering of the plants. Contractor will be responsible for labor and plant costs only in case of replacement other than specified under exceptions. In situations set out as exceptions, the Owner shall be responsible for both the cost of the plant and the labor.

B. <u>Materials and Operations.</u> All replacements shall be plants of the same kind and size as specified in the plant list. They shall be furnished and planted as specified; the cost shall be borne by the Contractor under conditions other than the above mentioned exceptions.

5. FINAL INSPECTION AND REPLACEMENT

- A. <u>Inspection.</u> Inspection of planting will be made at the conclusion of installation by the Owner or his representative for acceptance of the job.
- B. Replacement. At the end of the guarantee period, plants which have died or which are in an unhealthy or badly impaired condition, shall be replaced by the Contractor in accordance with the guarantee conditions. Just prior to this time, the Owner, or his representative, will make an inspection of the work to determine the condition of all plants. All plants not then in a healthy growing condition will be noted. All plants noted shall be removed from the site and replaced with plants of the same kind and size as originally specified. Such replacements shall be made in the same manner as specified for the original planting.